

REMARKS/ARGUMENTS

Applicants acknowledge, with thanks, receipt of the Office Action mailed July 21, 2006. Claims 1-22 have been rejected by the Examiner. Claims 1-22 have been cancelled. New claims 23-45 have been added. The subject matter of new claims 23-45 is not new matter and is described throughout the specification, including, for example, paragraphs [0035]-[0045], [0049]-[0054], and [0058]-[0064], as well in Figures 1 and 2.

NON-ART MATTERS

I. Rejections under 35 U.S.C. § 101

The Examiner has rejected claims 1-22 as being drawn to non-statutory subject matter, e.g., abstract algorithms or disembodied program steps. Applicants have cancelled claims 1-22 and added new claims 23-45 to more particularly point out and distinctly claim that which Applicants believe to be the invention. No new matter has been added as a result of this amendment.

II. Rejections under 35 U.S.C. § 112, First Paragraph

The Examiner has rejected claims 1-22 under § 112, first paragraph, for failure to comply with the enablement requirement. In particular, the Examiner has concluded that the specification does not teach to a sufficient degree the "simulation itself". While Applicants have cancelled claims 1-22, Applicants respectfully traverse this rejection.

Applicants direct the Examiner's attention to the specification at paragraphs [0038] and [0039], which Applicants respectfully submit, adequately discloses the "simulation itself" to one of ordinary skill in the art. Paragraph [0038] states that the system may be suitably adapted to apply Discrete Event Driven MAC protocol simulations in real-time fashion. Furthermore, the specification at paragraph [0039] describes, with sufficient enabling detail, a suitable example simulation tool for use in the subject application, e.g., "the high speed Cisco DES (Discrete Event Simulator) WLAN simulation tool may be employed in accordance with the system described herein". Additional teachings of the simulation itself may be found in paragraphs [0040]-[0042] of the instant specification. Applicants respectfully submit that the references made in paragraphs [0038] and [0039] teach, to one skilled in the art, the simulation itself.

III. Rejections under 35 U.S.C. § 112, Second Paragraph

The Examiner has rejected claims 1-16 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In particular, the Examiner has objected to the use of the term "Logic" as defined in paragraph [0027] and advanced in the claims. Withdrawal of this rejection is respectfully requested as the claims 1-16 have been cancelled and the new claims 23-45 do not recite the term "Logic".

The Examiner has rejected claims 7-8 for insufficient antecedent basis for the term "the algorithm". Withdrawal of this rejection is respectfully requested as Applicants have cancelled claims 7-8.

The Examiner has rejected claims 7-8 as being incomplete for omitting essential elements. Withdrawal of this rejection is respectfully requested as Applicants have cancelled claims 7-8.

The Examiner has rejected claims 20-21 as being indefinite in that the claims fail to point out what is included or excluded by the claim language. Applicants respectfully request withdrawal of this rejection as claims 20-21 have been cancelled.

The Examiner has rejected claims 13-16 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Examiner has stated that the meaning of the term "adapted to" is ambiguous. Applicants respectfully request withdrawal of this rejection as claims 13-16 have been cancelled and the new claims 23-46 do not contain the term "adapted to".

IV. Claim Interpretations

Applicants acknowledge, with thanks, the Examiner's notice of the last paragraph of the written description. The Applicants respectfully submit that the Examiner's interpretations of claims 1-22 have been addressed in that claims 1-22 have been cancelled and new claims 23-45 have been added. With respect to paragraph [0026], Applicants have amended the specification so as to render "computer-readable media" statutory in accordance with the Examiner's interpretation. With respect to paragraph [0027], Applicants respectfully submit that the term "Logic" is capable of comprising hardware (e.g. combinational logic), such as a logic gate,

programmable logic device, or other electronic circuit that performs a logical operation, which can also be implemented in software, or combinations thereof; or as the specification notes in paragraph [0027], an application specific integrated circuit capable of performing mathematical logic calculations.

ART MATTERS

I. Rejections under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-6, 9-19, and 22 as being unpatentable over U.S. Patent No. 5,920,607 to Berg in view of U.S. Patent No. 5,987,328 to Ephremides et al. Claims 1-6, 9-19, and 22 have been rejected as being unpatentable over Ephremides in view of U.S. Patent No. 6,356,758 to Almeida et al. For reasons that will not be set forth, claims 23, 32, and 40 are not obvious in view of Berg, Ephremides, or Almeida, when viewed alone or in any combination.

Independent claims 23, 32, and 40 recite the receipt of a current configuration of an associated wireless local area network, the receipt of a characteristic associated with the wireless local area network, and the receipt of an optimization parameter. This data is received by a management tool and communicated, via an interface, to a simulator. The simulator then generates an optimal configuration for the wireless local area network based upon simulations run with the current configuration data, the characteristic data, and the optimization data. The simulation is run in real-time so as to continually update and dynamically modify the network configuration for optimal performance using the current configuration as one element to determine the new configuration.

In contrast to claims 23, 32, and 40, Berg does not teach or suggest the use of current configuration data, current characteristic data and optimization data input into the simulator, as set forth in the instant application. According to Berg, once the degradation is identified, a corrective action is applied to a simulated network, to determine whether the corrective action partially or completely remedies the detected degradation of the network. Therefore, Berg expressly teaches the correction of a problem in the cellular network (Col. 4, lines 21-39, cl. 1) and does not teach or suggest the modification of a system that has not degraded in service. Stated another way, Berg teaches away from optimizing a network that is not experiencing a

"degradation of service". Thus, Berg, does not teach or suggest all of the elements in claims 23, 32, and 40.

The aforementioned deficiency in Berg is not remedied by any teaching of Ephremides. By way of background, Ephremides is directed to the design and placement of a wireless network. Ephremides does not teach or suggest, nor is Ephremides even applicable, to the real-time network management set forth in the instant claims. Stated another way, Ephremides teaches a simulation of a static system (Col. 3, lines 55-65), wherein the speed of the response is not a priority. In contrast, the subject application simulates the dynamic real-time performance of a network configuration and modifies the current configuration of the network in response to the simulation. Directly in contrast to the subject application, once an optimal configuration is determined using Ephremides, the optimization process ceases, whereas the subject application teaches the dynamic modification of the current network configuration, thereby adaptively adjusting the configuration in response to ever changing network conditions. Nothing in Ephremides, alone or in combination with any other cited reference, teaches or suggests the dynamic modification of a network configuration based upon the output of a simulator using a current network configuration, optimization data and characteristic data, as set forth in the independent claims.

The aforementioned deficiency in Berg and Ephremides is not remedied by any teaching of Almeida. In contrast to the subject matter recited by the independent claims, Almeida is directed to the simulation of configuration characteristics of a cell site in a cellular telephone network, i.e., a much less complex system than a wireless local area network. Almeida teaches a network manager selecting an optimal goal for the system. The network manager then retrieves a propagation parameter and enters the propagation parameter into the simulation system. The simulator is run and the result of the simulation is checked by the network manager to determine if the result is optimal. If not, the network manager "manipulates the parameter" and tries repeatedly until an optimal result is attained. The network manager then sets the optimal parameter for the network. This is in contrast to the subject application as currently claimed. According to the subject application, configuration data, characteristic data, and optimization data are all gathered by management and forwarded to a simulator, which uses all such data, not just propagation data, to determine an optimal result. Thus, Almeida requires the manual

manipulation of the parameters, which results in an inordinate amount of time for a complicated system, such as that of the wireless local area network and is only applicable to simple systems, such as that of a cellular telephone site. Therefore, Berg, Ephremides and/or Almeida, alone or in any combination thereof teach or suggest all of the elements of independent claims 23, 32, and 40.

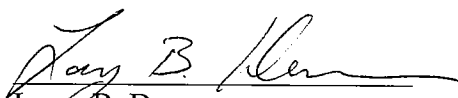
Claims 24-31 directly depend from claim 23 and therefore contain each and every element of claim 23. Claims 33-39 directly depend from claim 32 and therefore contain each and every element of claim 23. Claims 41-45 directly depend from claim 40 and therefore contain each and every element of claim 40. Thus, for the reasons set forth above with respect to claims 23, 32, and 40, claims 24-31, 33-39, and 41-45, respectively, are also not obvious based on the references cited by the Examiner.

CONCLUSION

For the reasons set forth, Applicants submit that the claims in their current state are not obvious in view of the references cited by the Examiner and a Notice of Allowance is earnestly solicited. The Examiner is invited to contact the undersigned if there are any other matters to be discussed to further advancement of the application. If there are any fees necessitated by the foregoing communication, the Commissioner is hereby authorized to charge such fees to our Deposit Account No. 50-0902, referencing our Docket No. 72255/00012.

Respectfully submitted,

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